

8b  
b3  
A1 14. (Amended) An apparatus comprising a recordable medium having a first and a second dot within a halftone cell, wherein ~~at least a portion of said first dot overlaps at least a portion of said second dot.~~

8b  
b3  
A2 20. (Amended) An ~~apparatus comprising~~ a recordable medium having a first and a second dot within a halftone cell, wherein said first and second dots are dissimilar.

8b  
b3  
A3 23. (Amended) The apparatus according to claim 22, wherein said different shape is selected from a group consisting of: elliptical, triangular, rectangular, circular, diamond and linear shapes.

8b  
b3  
A4 26. (Amended) An apparatus comprising a halftone screen having a halftone cell derived from a threshold equation, wherein ~~a fold function of said threshold equation generates at least one dot within said halftone cell according to~~  $\text{fold}(x) = [ [ [x] - 1/3 ] - 1/3 ] * 3$ .

8b  
b3  
A5 28. (Amended) The program product of claim 27, wherein said signal bearing medium includes at least one of a recordable medium and a transmission-type medium.

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31. (Amended) The program product of claim 30, wherein said signal bearing medium includes at least one of a recordable medium and a transmission-type medium.

Please add new claims 33-49 as follows:

33. A method for producing a halftone image using a program that executes on a processor, comprising creating a halftone screen including dots having different frequencies.

34. The method of claim 33, wherein creating said halftone screen further comprises integrating both fine and coarse pitch cells.

35. The method of claim 33, wherein creating said array further comprises overlapping at least a portion of a first dot of a halftone cell of said halftone screen with at least a portion of a second dot of said halftone cell.

36. The method of claim 33, wherein creating said array further comprises placing a first and a second dot within a halftone cell of said halftone screen, wherein said first and second halftone dots are dissimilar.

37. The method of claim 33, wherein producing said halftone screen further comprises producing an array including dots having different frequencies.

38. A printing system, comprising:  
a processor, and  
program code configured to execute on said processor, wherein said  
program code initiates printing an array including dots having different frequencies.

39. The apparatus of claim 38, wherein said array has a portion of  
integrated coarse and fine pitch cells.

40. The apparatus of claim 38, wherein said array has a halftone cell that  
includes at least a portion of a first dot of said halftone cell being overlapped with  
at least a portion of a second dot of said halftone cell.

41. The apparatus of claim 38, wherein said array has a halftone cell that  
includes first and second dots, wherein said first and second dots are dissimilar.

42. The method of claim 1, wherein said overlapping further comprises  
creating an array that includes dots having different frequencies.

43. The method of claim 8, wherein said placing of said first and second  
dots further comprises creating an array that includes dots having different  
frequencies.

44. The apparatus of claim 14, wherein said recordable medium further comprises dots having different frequencies

45. A printing system, including:

a scanning circuit for reading image data from a source;

a processor in communication with said scanning circuit, wherein said processor receives and processes the image data to generate an image file;

an image setter in communication with said processor, wherein said image setter receives said image file from said processor and produces a plurality of dots on a recordable medium, said plurality of dots including a plurality of frequencies.

46. A printing system, including:

a scanning circuit for reading image data from a source;

a processor in communication with said scanning circuit, wherein said processor receives and processes the image data to generate an image file;

an image setter in communication with said processor, wherein said image setter receives said image file from said processor and produces a plurality of dots on a recordable medium, said plurality of dots including a first and a second dot within a halftone cell, wherein at least a portion of said first dot overlaps at least a portion of said second dot.